

ABSTRACT

A method of providing at least part of a diaphragm and at least a part of a back-plate of a condenser microphone with a hydrophobic layer so as to avoid stiction between said diaphragm and said back-plate. The layer is deposited via a number small of openings in the back-plate, the diaphragm and/or between the diaphragm and the back-plate.

Provides a homogeneous and structured hydrophobic layer, even to small internal cavities of the microstructure. The layer may be deposited by a liquid phase or a vapour phase deposition method. The method may be applied naturally in continuation of the normal manufacturing process.

Further, a MEMS condenser microphone is provided having such a hydrophobic layer. The static distance between the diaphragm and the back-plate of the microphone is smaller than $10 \mu\text{m}$.